

REMARKS

Claims 1-12 are pending. By this Amendment, Claims 1-4, and 7-9 are amended and Claims 10-12 added. Applicants respectfully submit no new material is presented herein.

Claims 1-9 Recite Patentable Subject Matter

Claims 1, 3-6, and 9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-12 of copending Application No. 10/235,887. Applicants respectfully traverse the rejection.

The Office Action asserts that although the conflicting claims are not identical, they are not patentably distinct from each other because the '887 application **discloses** a recirculation pipe for introducing the gas with the branch flange and that it would have been obvious to make the recirculation pipe of metal. Applicants respectfully submit the **claimed subject matter** of the instant application is patentably distinct from the **claimed subject matter** of the '887 application. Applicants respectfully submit the claimed subject matter of the instant application is directed to the material composition of the recirculation pipe, the connection point of the recirculation pipe to the bypass exhaust gas passage, and the recirculation pipe being in thermal contact with the exhaust pipe. The claims of the '887 application are directed to the inlet of the recirculation pipe being integrally formed with the branch pipe flanged (claim 1) and first and second cases that are displaceable relative to each other (claim 4). Put simply, the claimed subject matter of the instant application and the claimed subject matter of the '887 application do not conflict with each other as they are directed to patentably distinct subject matter. Accordingly, Applicants respectfully submit the rejection is improper and

should be withdrawn.

Claims 1, 3-6, and 9 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Number 5,946,906 to Akazaki et al. (hereinafter “Akazaki”). Claims 1 and 3-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Akazaki as applied to Claim 1 above, and further in view of U.S. Patent Number 5,676,176 to Usui. Applicants respectfully traverse the rejections.

Pending Claim 1 recites a system for purifying exhaust gas of an internal combustion engine having a bypass exhaust gas passage, openable through a switch-over valve, branched from an exhaust pipe at a location downstream of a catalytic converter and merged into the exhaust pipe at a downstream point, an adsorbent installed in the bypass exhaust gas passage which adsorbs unburned components of the exhaust gas, and a recirculation pipe which recirculates the exhaust gas including the unburned components at a location upstream of the catalytic converter, wherein the recirculation pipe is made of metal, connected to the bypass exhaust gas passage at a lowest point of the recirculation pipe relative to an axis of gravity and close to the exhaust pipe, and in thermal contact with the exhaust pipe.

Applicants have reviewed the applied art of record and respectfully submit the applied art of record, alone or in combination, fail to disclose or suggest each and every feature recited by Claim 1.

In particular, Applicants respectfully note the recirculation (EGR) pipe (82) disclosed by Akazaki is not connected to the chamber (52) at the lowest point of the recirculation pipe (82) relative to an axis of gravity. Rather, as clearly shown in Figure 1 of Akazaki, the recirculation (EGR) pipe (82) has a first flat portion which transitions

upward via a vertical section and then a second, shorter, horizontal section before being connected to the chamber (52). Accordingly, the recirculation (EGR) pipe (82) disclosed by Akazaki is not connected to the chamber (52) at a lowest point of the recirculation pipe (82) relative to an axis of gravity and is susceptible to the accumulation of liquid in the first flat portion.

Usui merely discloses a bellows pipe and does not overcome the above-described drawback of Akazaki.

To qualify as prior art under 35 U.S.C. §102, a single reference must teach, i.e., identically describe, each feature of a rejected claim. As explained above, Akazaki fails to disclose or suggest each and every feature recited by claim 1. As such, Applicants respectfully submit Akazaki does not anticipate the subject matter recited by claim 1. Accordingly, Applicants respectfully submit Claim 1 should be deemed allowable over Akazaki for the reasons discussed above.

With regards to the rejection of Claim 1 under 35 U.S.C. §103, Applicants respectfully submit the Office Action has not established *prima facie* obviousness of Claim 1 as outlined in M.P.E.P. §2143.03 since Akazaki and Usui, alone or in combination, teach or suggest all of the features recited by Claim 1. Thus, Applicants respectfully submit pending Claim 1 is not rendered obvious by the Akazaki and/or Usui. Therefore, Applicant respectfully submits pending Claim 1 should be deemed allowable over Akazaki and/or Usui.

Claims 3, 5-7 and 9 depend, either directly or indirectly, from Claim 1. It is respectfully submitted that these dependent claims be deemed allowable for the same reasons Claim 1 is allowable, as well as for the additional subject matter recited therein.

Applicants respectfully request withdrawal of the rejections.

Claim 2 is rejected under 35 U.S.C. §103(a) as being unpatentable over Akazaki as applied to Claim 1 above, and further in view of U.S. Patent Number 6,256,984 to Voss et al. (hereinafter “Voss”).

Pending Claim 2 recites a system for purifying exhaust gas of an internal combustion engine having a bypass exhaust gas passage, openable through a switch-over valve, branched from an exhaust pipe at a location downstream of a catalytic converter and merged into the exhaust pipe at a downstream point, an adsorbent installed in the bypass exhaust gas passage which adsorbs unburned components of the exhaust gas, and a recirculation pipe which recirculates the exhaust gas including the unburned components at a location upstream of the catalytic converter, wherein the recirculation pipe is made of metal and in thermal contact with the exhaust pipe, and wherein an inner wall of the recirculation pipe is formed with liquid repellant and oil repellant film.

Akazaki is discussed above. Applicants respectfully note that the Office Action admits Akazaki fails to teach or suggest a coating or film on the inner wall of the pipe.

Voss merely discloses coating the inner wall of a pipe for thermal insulation purposes and not for repelling water and/or oil. Therefore, Applicants respectfully submit that Voss does not overcome the deficiencies of Akazaki.

Applicants respectfully submit the Office Action has not established *prima facie* obviousness of Claim 2 as outlined in M.P.E.P. §2143.03 since Akazaki and Voss, alone or in combination, teach or suggest all of the features recited by Claim 2. Thus,

Applicants respectfully submit pending Claim 2 is not rendered obvious by the Akazaki and/or Voss. Therefore, Applicant respectfully submits pending Claim 2 should be deemed allowable over Akazaki and/or Voss.

Claims 4, 8 and 10-12 depend, either directly or indirectly, from Claim 2. It is respectfully submitted that these dependent claims be deemed allowable for the same reasons Claim 2 is allowable, as well as for the additional subject matter recited therein.

Applicants respectfully request withdrawal of the rejection.

Conclusion

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, allowance of Claims 1-12, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 107101-00028.**

Respectfully submitted,
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